
General Health and Wellness

FIRE DEPARTMENT HEALTH AND WELLNESS PROGRAMS

- ☐ What is the difference between health and wellness?
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- What is the difference between health and wellness?
 - Health is the absence of disease.
 - Wellness is the optimal state of being.
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FIRE DEPARTMENT HEALTH AND WELLNESS PROGRAMS

- ☐ How can a Health and Wellness Program help?
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 - A medical screening exam can identify people that are not healthy. These people may have undiagnosed medical diseases.
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FIRE DEPARTMENT HEALTH AND WELLNESS PROGRAMS

- How can a Health and Wellness Program help?
 - A medical screening exam can identify people that are not healthy. These people may have undiagnosed medical diseases.
 - A Wellness Program can take people from a healthy state to an optimal state.
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Physical and Emotional Stress

- ❑ Firefighters face a potentially deadly combination of stress, heat and high body temperature, and dehydration.
 - ❑ During emergency activities more adrenaline is released into the bloodstream, muscles tense, breathing quickens, and heart rate and blood pressure rise.
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Physical and Emotional Stress

- ❑ Physical conditioning is crucial in public safety jobs because physical and emotional stress is unavoidable

10 reasons for exercise programs

1. *Improves heart-health*

The importance of aerobic exercise cannot be overstated. Heart attacks cause the majority of deaths among on-duty firefighters. Regular aerobic exercise helps prevent heart disease, strengthens heart muscle, decreases clotting, and stabilizes the electrical activity of the heart. Aerobic exercise slows plaque buildup in the arteries and also helps to normalize blood pressure, especially in people whose blood pressure is somewhat elevated.

10 reasons for exercise programs

2. *Improves heat tolerance*

Exercise increases blood volume, which improves heat tolerance. Improved heat tolerance will help firefighters battle more intense fires.

10 reasons for exercise programs

3. *Helps prevent Type II diabetes:*

Exercise improves the body's ability to regulate blood sugar, preventing Type II diabetes.

10 reasons for exercise programs

4. *Reduces risk of strains and sprains:*

Physical activity strengthens the muscles and joints and other structures like tendons and ligaments that help hold the body together. This strengthening decreases the risk of strains and sprains—the leading cause of injury for firefighters.

10 reasons for exercise programs

5. *May improve emotional state:*

Taking part in health and wellness programs improves their psychological and emotional states, which will improve emotional reactions during a life and death situation. An improved emotional state also improves self-esteem, self-efficacy, and sleep patterns, thereby reducing depression, anxiety, and stress.

10 reasons for exercise programs

6. *Maintains weight loss:*

Exercise and proper nutrition help control body weight and are essential in any weight loss program. Weight loss is more likely to be maintained if a person continues to exercise. Weight loss increases stamina, as well as aerobic abilities, both of which are needed for firefighting

10 reasons for exercise programs

7. *Maintains metabolic rate*

By preventing the loss of metabolically active muscle tissue, exercise helps prevent the drop in metabolic rate that sometimes accompanies weight loss and the gradual decline in metabolic rate that occurs with aging.

10 reasons for exercise programs

8. *Enhances ability to fight fires*

Exercise can slow the loss of stamina, strength, flexibility, bone density, and metabolic rate, which all affect an individual's ability to fight a fire.

10 reasons for exercise programs

9. *Prevents development of back problems*

Maintaining flexibility in the muscles of the legs and lower back and increasing strength in the abdominal and back muscles can help prevent the development of back problems.

10 reasons for exercise programs

10. *Encourages overall healthy lifestyle*

As fitness and nutrition improves, activity becomes easier. Exercise increases stress resistance and improves sleep.

Besides feeling better, firefighters lower their risk for injury or even death with more and consistent exercise.

Health Program

☐ Medical Screening Exams

Health Program

☐ Medical Screening Exams

- Essential components are in NFPA 1582
Standard on Occupational Medical Programs
 - They include
 - ☐ A History and Physical Exam
 - ☐ Vision Screening
 - ☐ Hearing Screening
 - ☐ Chest X-ray/ TB Screening
 - ☐ Blood and Urine Testing
 - ☐ Pulmonary Function Testing
 - ☐ EKG and Stress Testing
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Health Program

☐ Medical Screening Exams

- The baseline testing will screen for cardiac and pulmonary disease as well as some cancers and infectious diseases

Health Program

□ Medical Screening Exams

- The baseline testing will screen for cardiac and pulmonary disease as well as some cancers and infectious diseases
 - There are no limitations on adding additional testing to the annual physical exam.
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Health Program

☐ Are we getting this now?

☒ Yes

Health Program

- This is where an in house medical program can really make a difference and at a significant savings.
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Health Program

- The greatest advantage is having the same physician each year and also having that same physician available throughout the entire year.
 - **Old records are available** – Repeat referrals
 - **Comparisons can be made to previous lab testing** – Evaluate the rate of change in labs
 - **Lab results are available at the time of the exam** – Cholesterol levels and hepatitis testing are available at the time of exam
 - **Fitness levels and body composition measurements can be compared to previous years** – Is a change in weight a change for the better or for the worse?
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Health Program

- ☐ We have additional opportunities to help make the transition from healthy to well throughout the entire year.
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Health Program

- Two studies indicate that we should be looking for additional cancers due to an increased risk as firefighters.
 - **Cancer Risk Among Firefighters: A review and Meta-analysis of 32 Studies.** Published in the Journal of Occupational and Environmental Medicine, November 2006
 - **Cancer Incidence in Florida Professional Firefighters, 1981 to 1999.** Published in the Journal of Occupational and Environmental Medicine, September 2006
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Health Program

- These articles found an increase in
 - Bladder Cancer
 - Testicular Cancer
 - Lymphoma
 - Multiple Myeloma
 - Thyroid Cancer
 - Prostate Cancer
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Health Program

- ☐ The baseline physical exam will help with skin cancer and testicular cancer.
 - ☐ The blood panel will help with Leukemia, Lymphoma and Prostate Cancer screening.
 - ☐ The urinalysis may help with Bladder Cancer.
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Health Program

☐ Skin Cancer Screening

- Referrals should be given for any suspicious findings
 - The costs of a consultation and procedures vary but early diagnosis is the key to a cure in all of these cases
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Health Program

□ Colon Cancer

- Members over 45 are urged to have a colonoscopy
 - It is the 4th most common cause of death due to cancer in men and almost all of the cases are preventable with routine colonoscopies
 - Everyone should have one by age 50.
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Health Program

☐ Cardiovascular Disease

- Additional education – Decreased risk of death associated with a high level of fitness
 - Fitness levels are measured as a VO2 max
 - Repeat labs
 - Formulate treatment programs that start with lifestyle changes rather than starting with medications
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Health Program

- ☐ The new medical screenings will help save lives and improve the quality of firefighters lives
 - ☐ These steps are important
 - ☐ Other programs can be added to promote wellness within the department
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Health Program

☐ Immunizations

- Hepatitis
 - Tetanus
 - Influenza
 - Bulk purchasing of immunizations reduces the costs
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Health Program - Future

- Physician access for off-duty injuries and illness
 - Early evaluation, treatment and imaging of injuries shortens the recovery period
 - “Quick Care” treatment for allergies and infections decreases time off work
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Health Program - Recap

□ Health and Wellness Program Summary

- Improved screening for cancers
 - Improved measure of cardiac health with VO2 max testing
 - Improved quality of life by screening for problems such as thyroid disease and sleep apnea
 - Attention to mental health and substance abuse issues
 - Decrease injuries with a complete musculoskeletal exam
 - Decrease sick days from injuries and illness
 - Comparison of yearly data to look for developing trends in the department
 - Promote healthy lifestyles within the department through education
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FIRE DEPARTMENT HEALTH AND WELLNESS PROGRAMS

- ☐ Invest in the maintenance of our most valuable resource, **YOU**.
 - ☐ Retire **Healthy** so you can enjoy the fruits of your labor.
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